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Faunal remains and hunting patterns from the Iron Age of the Southern Highveld

by

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SYNOPSIS

The faunal remains from six Iron Age sites in the north-eastern and eastern Orange Free State are examined and some of their implications are discussed. The dominance of herd animals among the wild fauna suggest that hunting was directed towards these animals, particularly the Alcelaphine species. Historical sources from the first half of the nineteenth century describe two methods by which these animals were obtained.

The southern Highveld, bounded by the Vaal and Orange rivers to the north, west and south, and by the Lesotho highlands and the Drakensberg escarpment to the east, comprises the Orange Free State and parts of Lesotho and Griqualand West. Six excavated Iron Age sites in the eastern half of this region, which have been fully described elsewhere (Maggs 1974), provide the faunal evidence on which this paper is based. Although the sites are spread over a distance of 275 km their environments are much the same—elevated, rolling, grassy plains with an annual rainfall around 700 mm. They are situated at altitudes of between 1 550 and 1 700 metres above sea-level. They span the period from the fifteenth to the mid-nineteenth centuries and are broadly related to one another in terms of material culture, although there are distinct regional and chronological developments which are not relevant to the present discussion. In table 1 the sites are arranged approximately in chronological order, the earliest—OU 1 and OU 2 Midden 1 having radiocarbon-dates in the fifteenth century A.D. (Fagan, 1969: 167), OU 2 Midden 2 having dates within the seventeenth and nineteenth centuries, OO 1 being essentially eighteenth and early nineteenth century in age, OND 2 having an eighteenth century date (Phillipson 1970: 12) and OND 3 being a mid-nineteenth century site on the evidence of imports and local history. The sites are in the eastern half of the Orange Free State and are in rough geographic order from north to south, OU 1 and 2 are in Vrede district in the north-east, OO 1 is in Lindley district and OND 2 and 3 are in the Clocolan–Ladybrand area of the Caledon valley.

The identification of mammalian remains was restricted to jaws and teeth, and the minimum number of individuals of each species is shown in table 1. From this it is apparent that domestic stock was the most important source of meat on all sites with the exception of OU 2 Midden 1. Cattle predominate over small stock in terms of quantity of meat and even in absolute numbers at several sites, notably those from which the larger samples were obtained. A considerable proportion of livestock, presumably largely males, was slaughtered when juvenile. Even adults were seldom kept to an advanced age, which suggests that herds were being managed in such a way as to maintain fairly constant numbers. This may have been necessary in view of the paucity and poor quality of winter grazing on the Highveld, but it shows that herds

TABLE 1

Provisional lists of fauna from Iron Age sites on the southern Highveld.

Site	*OU* 1	*OU* 2 *Midden* 1	*OU* 2 *Midden* 2	*OO* 1	*OND* 2	*OND* 3
Bos taurus						
Cattle, adult	1	1	6	43	4	2
Cattle, juvenile	1		5	25		1
Ovis aries/Capra hircus						
Sheep/Goat, adult	1	2	1	13	2	3
Sheep/Goat, juvenile	1	2	2	4		3
Alcelaphine antelope:						
cf. *Connochaetes gnu*						
Wildebeest	1	4			1	
cf. *Alcelaphus caama*						
Hartebeest	1	2		1		
cf. *Damaliscus dorcas*						
Blesbok		1	1	1		
Total Alcelaphine	2	7	1	6	1	
Antidorcas marsupialis						
Springbok				3		
Indeterminate bovid		2		2		
Equid				1		
Canis cf. familiaris						
Dog				3		
Proteles cristatus						
Aardwolf	1					
Viverrid, medium				1		
Viverrid, small	2	2	1	2		1
Procavia capensis						
Hyrax				1		
Pedetes capensis						
Springhare		1		3		
Rodents, small	1	8	12	30		4
Shrew		3	1	2	1	
Bird		1		1		
Frog	1	1	4	3		
Fish			1	3		
Crab			3	34		
Unio caffer						
Freshwater mussel	10	21	28	929	4	2
Ostrich egg		1	1	1	1	
Achatina sp.						
Land snail	1	2	2			

were exploited essentially as a food resource. The special social value which would have been attached to cattle within these communities does not seem to have noticeably affected the pattern of slaughtering which is similar to that of many other stock-keeping societies.

But in this paper we are mainly concerned with the non-domesticated fauna which can broadly be divided into three groups: ungulates of which all but one are bovids; small carnivores, insectivores and rodents which are all burrowing animals; and finally the riverine species. Rare examples of hyrax, bird, ostrich egg-shell and Achatina land snail complete the list of faunal remains. The burrowing animals are attracted to the Iron Age sites because the ash middens provide relatively soft and deep deposits when compared to the almost soilless hilltops on which the sites occur. During fieldwork many of these animals, particularly mongoose and ground squirrel, were observed in action, blatantly flouting the provisions of the National Monuments Act on archaeological excavation. Their skeletal remains were often fresh, so they probably contributed little or nothing to the Iron Age diet. The frog, fish, crab and freshwater mussel were evidently exploited for food, although only at OO 1 would the two latter have provided an appreciable quantity of food and even there it would have been a small proportion of the diet. Thus the only wild animals that appear to have provided a significant portion of the diet on all sites except OND 3 were the ungulates.

The equid, presumably zebra or quagga, and the antelope, which comprise springbok and several Alcelaphine species—wildebeest, hartebeest and blesbok—were all common in the area in the first half of the nineteenth century. Reports by early travellers describe vast herds of springbok, wildebeest, hartebeest and quagga from near Thaba Nchu (Smith 1939: 157), springbok, blesbok, hartebeest, blue wildebeest and zebra from the Caledon valley (Backhouse 1844: 395; Casalis 1861), and from the northern and north-western Orange Free State black wildebeest, blesbok, springbok and quagga (Harris 1839: 235, 241), to mention only a few such references.

Evidently these species made up a large proportion of the biomass by the end of Iron Age times, and this was presumably the case in earlier centuries as well, thus their presence among the food waste is not surprising. However, the remains do not represent a cross-section of the fauna, for the smaller, more solitary and non-migratory antelope such as rhebuck, oribi, mountain reedbuck and steenbuck are absent, although they too were mentioned by early travellers (e.g. Casalis 1889: 141; Smith 1939: 135). Other edible mammals which would have been available but whose remains are rare or absent include hare, hyrax, porcupine and aardvark, while there would also have been a large variety of birds. By contrast with the smaller mammals the Alcelaphines and springbok normally occurred in large aggregations and they were migratory apparently following seasonal patterns of movement, often over large distances (Dorst & Dandelot 1970; Von Richter 1971). They were *par excellence* the herd animals of the grassy Highveld plains. And in the open, virtually treeless grassveld of the north-eastern Orange Free State in particular it would have been extremely difficult for individual hunters or small parties to approach within spear range of such animals; for the spear was evidently the basic Iron Age weapon in our area.

The Alcelaphines in their large aggregations characteristically associated with other species, notably the ostrich and quagga (Dorst & Dandelot 1970: 232; Von Richter 1971: 2). The effect of this would have been to bring together a complementary array of well-developed warning senses, making it even more difficult for the hunter to approach within range.

Yet the Iron Age hunters did not exploit the smaller game, which was so often the source of protein for Late Stone Age groups, but instead concentrated on the larger herd animals where conventional methods of stalking and killing by short-range missiles would probably have yielded little in return for a great deal of effort. The denser population and technological advances associated with the Iron Age would, however, have opened up new possibilities as well as placing hunting in a different socio-economic setting. The above can be inferred from archaeological evidence, but in order to see what forms this hunting may have taken we must turn to the early written evidence.

The historical literature of southern Africa abounds with references to pitfall traps. Perhaps the earliest is by Thomas Herbert who visited the Cape in 1627 and wrote that the inhabitants 'digge pits, couer them with boughs, and traine the couragious Lions thither, where they receive destruction' (Raven-Hart 1967: 123). Later in the seventeenth and eighteenth centuries there are further references to such traps being used by both hunter-gatherers and pastoralists to catch the larger mammals ranging in size from elephant and rhinoceros downwards. With the increasing pace of exploration from 1800 onwards many more examples were recorded particularly from the Orange River and farther north.

In our area Backhouse (1844: 410) records pitfalls along the margins of streams near Thaba Nchu, some of which had sharpened stakes at the bottom. In the north-western Orange Free State, Cornwallis Harris actually fell into one which was six feet deep but fortunately was half-full of muddy water and had no stake. This was one of a chain placed around a pool and Harris (1839: 246) subsequently met a part of 'Bechuana . . . remnants of a tribe called Lihoya [who] were engaged in eating up a blesbok that had been caught in one of their pit-falls'.

The most detailed description from our area is that of Bennie (1956: 13–14) who recorded that:

> 'Where there are pools or streamlets at the junction of grassy ridges there pits were dug near the edge of the water, so near indeed that they must have in many instances been filled with water to the level of the stream. They were formed at short distances, say 12 or 15 feet each from the other. The earth dug out of the pit was thrown into the streamlet or pool thus forming an opening among the rushes, flags, or coarse grass, and a sloping path into the water inviting the approach of a thirsty animal.'

Most occurrences were beside streams or pools, but Bennie (op. cit.) also describes a complex arrangement situated away from water in the area between the Sand and Vals rivers. The description is not entirely clear, but evidently the pits covered a large arcuate area which was divided into a number of beds separated from each other by thorn bush on the intervening low ridges. Within each bed the pits were arranged in rows—an estimated 90 pits in 6 rows per bed, although he admits that the estimate was made at a subsequent date.

By the time of Bennie's journey (1843) the traps were no longer in use, but in 1836 Arbousset and Daumas (1846: 98) found villages of Taung (who they refer to throughout as Lighoya) a few kilometres east of modern Senekal, where they were still being dug.

> 'These holes, measuring from five to six feet in depth by three in diameter, are shaped like a tumbler, in order that the animal falling into it may be bent together, and so rendered unable to extricate itself. The native name for these holes is *mamena* or twistings. By working hard, a man may make eight of these holes in a day; it is a work to which the Lighoya is trained from his youth. Armed with the cheketse, which he clenches firmly with both hands, he kneels down, and digs away with the sweat on his brow, knowing that his existence depends in a great measure upon his exertions. His mamenas finished, he covers them carefully in with reed and brushwood, and retires. They are situated near pools of water, and consequently in the way of the gnus and quaggas that come to graze there.'

The *cheketse* is described as a digger somewhat resembling a pike; the name and description suggesting that it was a tool made specifically for this purpose and not just the usual Iron Age digging implement, the hoe.

The use of pitfalls was clearly widespread and well developed on the southern Highveld. Another method of hunting which was widely used by Iron Age societies and for which there is a respectable antiquity is the organized game drive. Drives were held at a time and place appointed by the chief, particularly during droughts as they were considered to induce rain (Casalis 1861: 171). Ritual preparations were carried out and the people assembled beforehand, not only to receive instructions for the hunt but also for announcements on matters of state (Smith 1939: 156). It seems that such occasions were used to promote the unity of the group and the authority of the chief.

Andrew Smith (op. cit.: 157) was present at a Rolong game drive at Thaba Nchu in 1834 and has left us a vivid description.

> 'When the proper directions were given, the party divided into two portions and proceeded [in] opposite ways. The greatest number went to form the ring on the windward side. When the front men of the two parties met they began to diminish the ring by advancing slowly from all points towards the centre. When first formed the circle might be about 3 miles in diameter, but so long as it continued of this size the game appeared to pay little regard to their situation. As soon as it was sufficiently narrowed that in the middle the animals could see themselves to be entirely surrounded, they appeared to get very uneasy and made repeated rushes in various directions. The first rushes were generally unavailing, but when they saw themselves gradually closed upon the others were more determined and rarely did they turn even though great efforts were made to stop them. In passing, the Caffers closed upon them and used their hassegays with great alertness. Several herds of springboks were all enclosed and scarcely one of them broke out without several being killed. The kerrie was used against these animals. Many young gnus were also killed or caught by the dogs. There was contained within the circle this day an immense number of gnus, a number of quaggas, one hartebeast [and] a great many springboks. The slaughter was pretty considerable and many pack oxen were loaded with the spoils.'

The game was distributed according to an established pattern, certain portions going to the chief, and it was cut up before being carried back to the settlement by oxen (Casalis 1861: 172).

Bennie's description of the large arcuate arrangement of pits suggest that they were designed to be used in combination with game drives to concentrate the animals. Hunts in which the game was partly surrounded and driven towards a line of pits may often have occurred on the Highveld as was the case in Zululand (Bryant 1949: 688).

A variety of southern African peoples were using both pitfalls and game drives in early historical times and neither technique is unique to the Iron Age of the Highveld. Yet in the open grassy plains of the Orange Free State they would have been particularly successful, perhaps the only available methods by which any quantity of game could have been caught. The drives in particular required the co-operation of a large number of people—the scale of Iron Age political organization being appropriate for this—while the use of such tactics enabled the short-range missiles—spears and clubs—to be used effectively. The advent of iron implements would have greatly facilitated the digging of pits.

The use of pitfall traps and large-scale game drives would have been particularly effective against the larger herd animals rather than the smaller and more solitary species. It is significant that in the historical accounts of the use of these methods the animals obtained include equids, springbok and especially the Alcelaphines; the same species whose remains occur in the Iron Age middens. The archaeological evidence indicates that this activity was of considerable economic importance to most of the Iron Age communities of the southern Highveld.

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